Docket No.: 10276-067001 (JDP-067)

## WHAT IS CLAIMED IS:

1. A method for the prevention or treatment of diabetes comprising: administering to a human subject in need of prevention or treatment, a pharmaceutical composition comprising a Type 1 diabetes autoantigen or immunologically active fragment or variant thereof and an oil-based carrier.

- 2. The method of claim 1, wherein the autoantigen is selected from the group consisting of: preproinsulin, GAD 65, ICA512/IA-2, HSP60, carboxypeptidase H, peripherin, and ganglioside.
- 3. The method of claim 1, where the autoantigen is preproinsulin or an immunologically active fragment or variant thereof.
- 4. The method of claim 3, wherein the autoantigen is human insulin B-chain or an immunologically active fragment or variant thereof.
- 5. The method of claim 4, wherein the insulin B-chain fragment comprises amino acids 33-37 of SEQ ID NO:1.
- 6. The method of claim 1, wherein the autoantigen is GAD65 or an immunologically active fragment or variant thereof.
  - 7. The method of claim 1, wherein the pharmaceutical composition is a vaccine.
  - 8. The method of claim 1, wherein the autoantigen is a synthetic peptide.
- 9. The method of claim 1, wherein the oil based carrier is IFA or Montanide ISA or an equivalent composition.
- 10. A pharmaceutical composition comprising a type 1 diabetes autoantigen and an oil-based adjuvant.

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11. The pharmaceutical composition of claim 10, wherein the autoantigen is selected from the group consisting of: preproinsulin, GAD 65, ICA512/IA-2, HSP60, carboxypeptidase H, peripherin, and ganglioside.

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12. The pharmaceutical composition of claim 10, wherein the autoantigen is preproinsulin or an immunologically active fragment thereof.

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13. The pharmaceutical composition of claim 12, wherein the autoantigen is human insulin B-chain or an immunologically active fragment or variant thereof.

14. The pharmaceutical composition of 13, wherein the insulin B-chain fragment comprises amino acids 33-37 of SEQ ID NO:1.

15. The pharmaceutical composition of claim 10, wherein the autoantigen is GAD65 or an immunologically active fragment or variant thereof.

16. The pharmaceutical composition of claim 10, wherein the autoantigen is a synthetic peptide.

17. The pharmaceutical composition of claim 10, wherein the oil-based adjuvant is IFA or Montanide ISA or an equivalent composition.

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18. The pharmaceutical composition of claim 13, wherein the human insulin Bchain is solubilized in urea.

19. A kit for preventing or treating type 1 diabetes comprising: a human type 1 diabetes autoantigen or immunologically active fragment or variant thereof, an oil-based carrier, and instructions indicating suitability for human use.

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- 20. The kit of claim 19, wherein the autoantigen is selected from the group consisting of: preproinsulin, GAD 65, ICA512/IA-2, HSP60, carboxypeptidase H, peripherin, and ganglioside.
  - 21. The kit of claim 19, wherein the autoantigen is a synthetic peptide.
  - 22. The kit of claim 19, wherein the autoantigen is lyophilized.
- 23. The kit of claim 19, wherein the autoantigen is human insulin B-chain or an immunologically active fragment or variant thereof.
  - 24. The kit of claim 19, wherein the oil-based carrier is IFA or Montanide ISA or an equivalent composition.
  - 25. A method of enabling a health care provider to prevent or treat type 1 diabetes in a human subject, the method comprising:

providing a health care provider with a human diabetes type 1 autoantigen or immunologically active fragment or variant thereof;

optionally providing the health care provider with an oil-based carrier; and providing the health care provider with instructions for use of the autoantigen to treat the subject.

- 26. The method of claim 25, wherein the autoantigen is selected from the group consisting of: preproinsulin, GAD 65, ICA512/IA-2, HSP60, carboxypeptidase H, peripherin, and ganglioside.
  - 27. The method of claim 25, wherein the autoantigen is a synthetic peptide.
  - 28. The method of claim 25, wherein the autoantigen is lyophilized.

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29. The method of claim 25, wherein the autoantigen is human insulin B-chain or an immunologically active fragment or variant thereof.

30. The method of claim 25, wherein the oil-based carrier is IFA or Montanide

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